

that one skilled in the art could make and use the claimed invention at the time the application was filed based on the disclosure in the specification. Applicants further rely upon §2164.06(a) of the MPEP in support of the argument that an applicant is not required to describe why the invention works, only how to make and use the invention for its intended purpose. The specification is not required to identify missing parts or relationships between parts if the disclosure meets the foregoing requirements. Thus, even with respect to the cancelled original claims 1-5, the Examiner has not explained why the missing information is needed to provide enablement and why one skilled in the art could not supply the information without undue experimentation. Still, a *prima facie* case for lack of enablement cannot be established against the subject matter of new claims 6 and 7 for all of the foregoing reasons.

II. Response to Rejection of Claim 5 under 35 USC § 112, second paragraph

Claim 5 is rejected by the Examiner under 35 U.S.C. 112, second paragraph, for reciting the term “easy” which is a relative term and renders the claim indefinite.

Applicants submit that the Examiner's rejection has been rendered moot in view of the cancellation of claim 5 and that the rejection is inapplicable to the subject matter of new claims 6 and 7 as indicated herein.

III. Response to Rejection of Claims 1-5 under 35 U.S.C § 102(e)

Claims 1-5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Adachi et al. (U.S. Patent No. 5,430,606) and Shimodaira et al. (U.S. Patent No. 6,038,123).

A. The Examiner considers claims 1 and 2 as *prima facie* anticipated by Adachi in view of Shimodaira. The Examiner relies upon Adachi for disclosing carbon electrodes for a double layer capacitor for storing high energy per unit volume so that small-sized capacitors with increased capacity can be fabricated and the examples of Adachi having an area rate of edge faces of greater than 20%.

The Examiner further relies upon Shimodaira for teaching increasing the carrier concentration in the interface direction so as to increase the capacitance per unit area of the carbon material (column 3, lines 26-38) and examples for the capacitance per unit area of the edge plane and the basal plane of graphite being from 50 to 70 micrometers per cm² and 3 micrometers per cm² respectively (column 2, lines 63-65).

Applicants submit that the Examiner's rejection is moot in view of cancelled claims 1-5 and that new claims 6 and 7 are patentable over the cited references for the following reasons. New **Claim 6**, which incorporates the subject matter of cancelled claims 2 and 5, is directed to an **activated carbon** for an electric double-layer capacitor being formed from **graphitizable carbon** and having a **high electrostatic capacity** as shown in Samples 3-5 in Table 3 on page 9 of the specification. New **Claim 7**, which depends from claim 6, incorporates the subject matter of cancelled claim 3 and is directed to the activated carbon having **electrostatic capacity density exceeding 80 F/cc** and a specific **surface area equal to or less than 1,500 m²/g**.

The present claimed invention is patentably distinguishable from Adachi for the reason that Adachi does not teach or suggest forming the activated carbon from a graphitizable carbon. Adachi teaches that coconut shells are the most preferred materials (Col. 1, lines 63-64; Examples 1-6) for use in obtaining the activated carbon. Significantly, carbonaceous materials obtained from coconut shells are non-

graphitizing carbon. Accordingly, Adachi is not anticipatory to (nor enabling for) the present claimed activated carbon formed from a graphitizable carbon.

Another distinguishing feature of the present claimed invention is the area rate (A) of the edges faces (e) being at least equal to or greater than 20%. This property is inherent to the inventive activated carbon, and without which, the invention would be inoperable. Adachi does not teach or suggest this physical property much less a preferred area rate. Accordingly, Adachi is not anticipatory to (nor enabling for) the present claimed activated carbon having an area rate of the edge faces being at least equal to or greater than 20%.

Shimodaira teaches that to increase the electrostatic capacitance, a random alignment of the graphic structure is preferred, i.e., preventing graphite planes from laminating in parallel to one another (Col. 2, lines 54-62; Col. 4, lines 9-12). Thus, one skilled in the art from reading Shimodaira would understand that the preferred carbonaceous materials are non-graphitizing carbon, and that such materials would contribute to obtaining the random structural alignment.

Shimodaira alludes to the edge plane (e) and the basal plane (b) (Col. 2, lines 62-67) but is specifically silent with respect to the area rate A of edge plane (e), and therefore, Shimodaira is not anticipatory to (nor enabling for) the present claimed invention.

It is also apparent from the foregoing analysis that the features recited in new claims 6 and 7 are not anticipated by the combined disclosures of Adachi and Shimodaira.

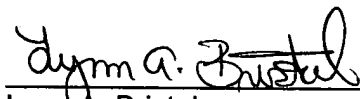
B. Regarding claims 3-5 and the Examiner's rejection of these claims for anticipation in view of Adachi, Applicants submit that the Examiner's rejection has been rendered moot in view of the cancellation thereof, and that the rejection is inapplicable to the subject matter of new claims 6 and 7 as indicated herein.

CONCLUSION

In view of the new claims and all of the foregoing arguments, Applicants submit that the Examiner's rejections of the claims under 35 U.S.C. §§ 102(e) and the first and second paragraphs of 112, are now overcome. Applicants submit that the claims as well as the entire application are now in condition for allowance, and the Examiner is requested to allow this application to pass to issuance.

In the event this paper is not considered to be timely filed, the applicants respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees which may be due with respect to this paper may be charged or any overpayment should be credited to Deposit Account No. 01-2300, referencing Docket No. 107348-00047.

Respectfully submitted,



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